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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/452,802	12/02/1999	DINESH KASHINATH ANVEKAR	YO999-540	1773

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RESTON, VA 20190

EXAMINER

BAYARD, EMMANUEL

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 05/06/2003

10 67

Please find below and/or attached an Office communication concerning this application or proceeding.

7

Office Action Summary

Application No.

09/452,802

Applicant(s)

ANVEKAR ET AL.

Examiner

Emmanuel Bayard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication; even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 12 and 14 is/are rejected.
- 7) ☒ Claim(s) 6-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

1. This is in response to amendment filed on 2/19/02 in which claim 1-3, 5-12 and 14 are pending and claims 4 and 13 are canceled. The applicant's amendments have been fully considered but they are moot base on the new ground of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 1-3, 5 and 12, 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Lindsay et al U.S. Patent No 6,085,076 .

As per claim 1, Lindsay et al discloses a frequency hopping time division duplex indoor wireless communication system comprising: a base station (see fig. 1 element 104 and col.2, lines 51-52) is functionally equivalent to the claimed (master unit) having a controller (see figs. 4, 8a-8b elements 105, 415, 830 and col.1, line 61) is functionally equivalent to the claimed (processor) and a first frequency selection unit (see col.5, lines 45-65 and col.34, lines 5-15 and col.26, lines 14-18 and col.29, lines 59-67) for finding a current frequency on which to transmit and receive during the current time slot and at least a second switch circuit (see col.26, lines 1-14) interfaced with said processor (105 to select frequencies to be used in future time slots; and a plurality of user stations is functionally equivalent to the (mobile stations) (see fig.1 elements 102) communicating with said base station (104).

As per claim 2, the time division duplex of Lindsay et al inherently includes logic units to perform frequency hop selection according to predetermined standards.

As per claim 3, the time division duplex of Lindsay et al inherently includes providing binary information about a Pico-cell related address bits and clock bits corresponding to the time slot.

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As per claims 5 and 12, Lindsay et al discloses a frequency hopping indoor wireless communication system comprising: a base station (see fig. 1 element 104 and col.2, lines 51-52) is functionally equivalent to the claimed (master unit) and a plurality of user stations is functionally equivalent to the claimed the claimed (slave units)(see fig.1 elements 102); said master unit (104) having a plurality of link state counters $C(i,j)$ (see fig.1 elements 110 and col.4, lines 13-20), wherein the states of wireless link between the master unit and a slave unit are recorded in link state counters (see col.24, lines 63-67) provided one for each frequency of communication f_l between the master and the slave "I".

As per claim 14, the time division duplex of Lindsay et al inherently includes an expected state of wireless links with reference to interference.

Allowable Subject Matter

4. Claims 6-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 8-11 are allowed over the prior art of record.

6. The following is a statement of reasons for the indication of allowable subject matter: the present invention teaches a frequency hopping time division duplex communication system. The prior arts of Lindsay et al Patent No 6,085,076 teaches a similar frequency hopping

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communication system. However the above prior arts fail to anticipate or render obvious the recited features: the counter is reset to zero when a current transmission/reception with reference to slave unit on frequency is successful or when the count value exceed exceeds a reset threshold T as recited in claim 6. If the link state history counter values of all active slave units are above a threshold T, the master unit chooses a slave unit whose link state history counter has a lowest value, and decides on a packet size of one as recited in claim 8. If all frequencies corresponding different allowed packet sizes are such that the corresponding link state history counter values are above the threshold T, the master unit proceeds to choose another slave unit for transmission as recited in claim 9. The master unit constructs a link state history table of counters after receiving values of goodness counters from all the slave units and uses this information during a next scheduling period as recited in claim 10.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Honkasalo et al U.S. Patent No 6,094,426 teaches a method for scheduling packet data transmission.

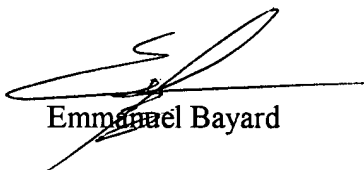
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is (703) 308-9573. The

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examiner can normally be reached on Monday-Thursday from 8:00 AM - 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (703) 305-4378. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

A handwritten signature in black ink, appearing to read 'Emmanuel Bayard', is written over a horizontal line.

Patent Examiner

April 24, 2003